

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  INTEU/P31704PC	<b>FOR FURTHER ACTION</b>  see Form PCT/ISA/220 as well as, where applicable, Item 5 below.	
International application No.  PCT/GB2004/005463	International filing date (day/month/year)  31/12/2004	(Earliest) Priority Date (day/month/year)  31/12/2003
Applicant  INTELLIGENT ENERGY LIMITED		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☒ Certain claims were found unsearchable (See Box II).

3. ☐ Unity of invention is lacking (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 14

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB2004/005463

A. CLASSIFICATION OF SUBJECT MATTER  
H01M8/04 H01M8/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/63992 A (DE NORA FUEL CELLS S.P.A; BRAMBILLA, MASSIMO; MAZZUCHELLI, GABRIELE) 26 October 2000 (2000-10-26) claim 1; examples 1,5	1-12, 15-26
Y	-----	13,14,27
Y	US 2003/186093 A1 (ST-PIERRE JEAN ET AL) 2 October 2003 (2003-10-02) claims 1-49	13,14,27
X	US 2002/102448 A1 (BREAULT RICHARD D ET AL) 1 August 2002 (2002-08-01)  paragraph '0036!  ----- -/--	1,4, 7-12, 15-19, 21-26

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

9 March 2006

Date of mailing of the international search report

16/03/2006

Name and mailing address of the ISA

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Reich, C

## INTERNATIONAL SEARCH REPORT

International Application No

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 376 111 B1 (MATHIAS MARK F ET AL) 23 April 2002 (2002-04-23)  paragraph '0017!; <u>claims 1-19</u>	1,4, 7-12, 15-19, 21-26
X	DE 100 36 916 A1 (PROTON MOTOR FUEL CELL GMBH) 14 February 2002 (2002-02-14)  paragraphs '0032!, '0033!	1,4, 7-12, 15-19, 21-26
X	DE 25 33 215 A1 (LICENTIA PATENT-VERWALTUNGS-GMBH; LICENTIA PATENT-VERWALTUNGS-GMBH, 60) 27 January 1977 (1977-01-27) page 6, paragraph 3 - page 8, paragraph 4	1,4, 7-12, 15-19, 21-26
A	US 6 524 733 B1 (NONOBE YASUHIRO) 25 February 2003 (2003-02-25) the whole document	1-27

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 28,29

Claims 28 and 29 have not been searched under the provisions of Article 17(2)(b) PCT since these claims contain references to the drawings and since these claims are therefore so unclear that no meaningful search and examination is possible.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/GB2004/005463

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 28, 29  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2004/005463

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0063992	A	26-10-2000	AT 256919 T AU 756163 B2 AU 4912900 A BR 0009888 A CA 2368895 A1 CN 1347575 A DE 60007299 D1 DE 60007299 T2 DK 1171926 T3 EP 1171926 A1 ES 2213016 T3 IT MI990829 A1 JP 2002542591 T TW 499779 B US 6835477 B1	15-01-2004 09-01-2003 02-11-2000 22-01-2002 26-10-2000 01-05-2002 29-01-2004 16-09-2004 19-04-2004 16-01-2002 16-08-2004 23-10-2000 10-12-2002 21-08-2002 28-12-2004
US 2003186093	A1	02-10-2003	CA 2379363 A1	28-09-2002
US 2002102448	A1	01-08-2002	AU 6229700 A DE 10084849 T0 JP 2003505851 T WO 0108246 A1 US 6316135 B1	13-02-2001 05-09-2002 12-02-2003 01-02-2001 13-11-2001
US 6376111	B1	23-04-2002	CA 2326247 A1 DE 10065460 A1	25-07-2001 16-08-2001
DE 10036916	A1	14-02-2002	AU 8203201 A WO 0211221 A2 EP 1412997 A2	13-02-2002 07-02-2002 28-04-2004
DE 2533215	A1	27-01-1977	NONE	
US 6524733	B1	25-02-2003	DE 10007973 A1 JP 2000243418 A	21-09-2000 08-09-2000